

CS 1337-030: Computer Science II

Grant Wilde

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Office Hours: MWF 1-3 pm, TR 11:30 am - 1:30 pm

Office: MCS 205K

Course Website: Blackboard

Class Hours: TR 9:30-10:45 am

Class Room: MCS 114

Course Description

Continuation of Computer Science 1336. Problem solving and program development techniques emphasizing modular design. Includes advanced programming topics such as class design, records, strings, pointers, and bit manipulation.

Prerequisite

CS 1336 or a first course in C or C++ programming

Learning Outcomes

By completing this course,

1. Students will become familiar with the internal storage of integral data;
2. Students will learn how to create, compile, link, and run a program in a Unix operating environment;
3. Students will learn how to create multi-file source programs;
4. Students will be introduced to bit manipulation, including left and right shift operators and bitwise operators (not, and, or, exclusive or);
5. Students will be introduced to pointers;
6. Students will learn about character data, including its representation and available functions for testing and manipulating characters;
7. Students will be introduced to the string data type and various functions for manipulating strings;
8. Students will be introduced to structured data; and
9. Students will be introduced to object oriented programming using the class concept.

Course Delivery

This is a face-to-face course with learning resources and supplemental materials posted in Blackboard. You are allowed to come to class every Tuesday and Thursday, i.e. there will not be split classes. All material needed to take this course remotely will be posted to Blackboard. Materials posted to Blackboard will take the form of PDF notes, Powerpoint slides, and recorded videos.

Required Text and Materials

Textbook: Gaddis, T. (2018). starting out with C++ From Control Structures through Objects (9th Edition), Pearson, Book Only: ISBN 9780134498379

Technology: You must have access to an adequate computer or laptop (Chromebook is insufficient) with a webcam and Internet connectivity to participate fully in the class. ASU computer labs are available for your use. A table describing supported browsers can be viewed on the [Blackboard support site](#). Remote students must use Respondus Lockdown Browser with a webcam to take exams. For more information on Respondus, please visit the e-Learning [web page](#).

COVID Related Requirements

Face Coverings: As a member of the Texas Tech University System, Angelo State University has adopted the mandatory Facial Covering Policy to ensure a safe and healthy classroom experience. Current research on the COVID-19 virus suggests there is a significant reduction in the potential for transmission of the virus from person to person by wearing a mask/facial covering that covers the nose and mouth areas. Therefore, in compliance with the university policy students in this class are required to wear a mask/facial covering before, during, and after class. Faculty members may also ask you to display your daily screening badge as a prerequisite to enter the classroom. You are also asked to maintain safe distancing practices to the best of your ability. For the safety of everyone, any student not appropriately wearing a mask/facial covering will be asked to leave the classroom immediately. The student will be responsible to make up any missed class content or work. Continued non-compliance with the Texas Tech University System Policy may result in disciplinary action through the Office of Student Conduct.

Exemptions: Students requesting an exemption to the face mask may need to wear a clear plastic face shield instead of a face mask. Students needing this accommodation should register with Student Disability Services and provide the appropriate documentation supporting this request. No accommodation exists that would exempt a student from wearing a mask/facial covering at any university-sponsored activity or event.

Sanitation: Wipes will be provided for students to wipe down keyboards and other surfaces before class begins. Please wipe/clean your area upon arrival to class.

Wellness Screening: The ASU daily wellness screening must be completed prior to coming to class.

Communication

- **Email:** All private communication will be done exclusively through your ASU email address. Check frequently for announcements and policy changes. In your emails to faculty, include the course name and section number in your subject line.
- **Blackboard Collaborate Office Hours:** I will be available every weekday during office hours in the virtual Collaborate classroom under Blackboard. You will be able to text, audio/video chat and share your computer screen with me/

Activities Assessing Learning Outcomes

Programming Assignments The following guidelines are to be observed concerning the programming assignments (labs):

- No late assignment will be accepted. No e-mail submission is accepted. There are no exceptions to this rule.
- Labs are due by the end of the day on the designated due date.
- The labs will be developed on the department's Unix environment.
- All assignments will be submitted electronically, as discussed in class.
- Assignments will be graded on the CS department's Unix environment. If you develop solutions to the programming assignments in a different environment such as Microsoft Visual Studio, it is your responsibility to ensure that these solutions work correctly in the Unix environment also.
- You are responsible for doing your own work. You may be asked to defend/explain your work at any time. You are encouraged to work with your classmates and use the resources of the Internet to understand and complete the assignments; however, when you submit an assignment, you are verifying that it is your own work. Cheating will not be tolerated.

Exams Four exams will be given throughout the semester (including the final). The following guidelines are to be observed concerning the exams:

- There are no makeup exams. Only exception will be student absence for observance of religious holy day (see Additional Policies below).
- If one exam is missed, the final exam will count double to make up for the missed exam. Only one missed exam can be made up this way. If more than one exam is missed, a grade of zero will be given for the additional missed exam.
- *The final exam must be taken on its assigned date.* For students taking all four exams, the final exam grade can replace a lower grade on one of the first three exams if the final exam grade is higher. Only one regular exam grade can be replaced in this way.

Grades

Your course grade will be based on the following:

Activity	Percentage
Programming Assignments	40%
Exams	60%

ASU employs a letter grade system. Grades in this course are determined on a percentage scale:

Grade	Percentage
A	90-100
B	80-89
C	70-79
D	60-69
F	0-59

Incomplete Grade Policy

It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required. See ASU Operating Policy 10.11 [Grading Procedures](#) for more information.

Course Outline

Week	Date	Topics
1	January 25 - 29	Number Systems
2	February 1 - 5	Internal numerical representation
3	February 8 - 12	Internal numerical representation
4	February 15 - 19	Internal numerical representation
5	February 22 - 26	Exam 1
6	March 1 - 5	Bitwise operators
7	March 8 - 12	Bitwise operators
8	March 15 - 19	Pointers
9	March 22 - 26	Exam 2 , Pointers
10	March 29 - April 2	Pointers
11	April 5 - 9	Characters
12	April 12 - 16	Strings
13	April 19 - 23	Exam 3 , Structures
14	April 26 - 30	Structures, Classes
15	May 3 - 7	Classes
16	May 10 - 14	Final Exam: Thursday, May 13, 2021, 8:00 - 10:00 a.m.

Course Policies

All students are required to follow the policies and procedures presented in these documents:

- [Angelo State University Student Handbook](#)
- [Grading Procedures](#)

Policy on absenteeism/non-communication

- Attendance will be taken every day in the beginning of class. New lecture material and programming assignments will be given, so absenteeism will negatively impact your grade. Failure to participate or communicate on your part will result in an appropriate reduction of your grade and possibly in your failure of this course.

Submissions/Late work

- All assignments, unless otherwise specified, must be submitted to Blackboard containing your name, course name, the title of the assignment and the due date.
- No late assignment will be accepted. No e-mail submission is accepted. There are no exceptions to this rule.

Student Disability Services

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student's responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about the application process and requirements, visit the Student Disability Services website [Student Disability Services website](#). The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Ms. Dallas A. Swafford

- Director of Student Disability Service
- 325-942-2047
- dallas.swafford@angelo.edu
- Office of Student Affairs
- [Houston Harte University Center](#), Room 112

Title IX Statement

The University prohibits discrimination based on sex, which includes pregnancy, sexual orientation, gender identity, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination including: sexual assault, sex-based discrimination, sexual exploitation, sexual harassment, public indecency, interpersonal violence (domestic violence and/or dating violence), and stalking. As a faculty member, I am a Responsible Employee meaning that I am obligated by law and ASU policy to report any allegations I am notified of to the Office of Title IX Compliance.

Students are encouraged to report any incidents of sexual misconduct directly to ASU's Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator at:

Michelle Miller, J.D.

- Director of Title IX Compliance/Title IX Coordinator
- 325-486-6357
- michelle.miller@angelo.edu
- Mayer Administration Building 210.

You may also file a report online 24/7 at www.angelo.edu/incident-form

If you are wishing to speak to someone about an incident in confidence you may contact the University Health Clinic and Counseling Center at 325-942-2173 or the ASU Crisis Helpline at 325-486-6345.

For more information about Title IX in general you may visit www.angelo.edu/title-ix.

Student Absence for Observance of Religious Holy Days

A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. See ASU Operating Policy 10.19 Student Absence for [Observance of Religious Holy Day](#) for more information.

Student Conduct Policies

Academic Integrity

Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU.

The College of Science and Engineering adheres to the university's [Statement of Academic Integrity](#).

All assignments should be the product of the student alone. Cheating occurs when a student either submits work for a grade that is not entirely due to his/her own effort or allows others to use his/her work.

Plagiarism

Plagiarism is a serious topic covered in ASU's [Academic Integrity policy](#) in the Student Handbook. Plagiarism is the action or practice of taking someone else's work, idea, etc., and passing it off as one's own. Plagiarism is literary theft.

In your discussions and/or your papers, it is unacceptable to copy word-for-word without quotation marks and the source of the quotation. It is expected that you will summarize or paraphrase ideas giving appropriate credit to the source both in the body of your paper and the reference list.

Papers are subject to be evaluated for originality via Turnitin. Resources to help you understand this policy better are available at the [ASU Writing Center](#).

Copyright Policy

Students officially enrolled in this course should make only one printed copy of the given articles and/or chapters. You are expressly prohibited from distributing or reproducing any portion of course readings in printed or electronic form without written permission from the copyright holders or publishers.

Modifications to the Syllabus

The instructor and the university reserve the right to modify or change the syllabus (schedule, course requirements, grading policy, etc.) as the curriculum and/or program require(s).